

# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)  
Field: WELD COUNTY Well: ANTELOPE FEDERAL T34-20-17XRLNB  
Facility: SEC.20-T05N-R62W Wellbore: ANTELOPE FEDERAL T34-20-17XRLNB PWB

Plot reference wellpath is ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

True vertical depths are referenced to RIG (17'KB) (RKB)	* - Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (17'KB) (RKB)	North Reference: True north
RIG (17'KB) (RKB) to Mean Sea Level: 4673 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingimjmm on 2018-07-31
	Database: Denver

## Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.20-T05N-R62W				3318862.546	1383319.349	40°22'47.856"N	104°21'17.964"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)	-31.97	2334.17	3321316.832	1383317.522	40°22'47.539"N	104°20'47.803"W	
RIG (17'KB) (RKB) to Ground level (At Slot: SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20))						4673ft	
Mean Sea Level to Ground level (At Slot: SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20))						0ft	
RIG (17'KB) (RKB) to Mean Sea Level						4673ft	

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	145.000	17.00	0.00	0.00	0.00	0.00
End of Tangent	800.00	0.000	145.000	800.00	0.00	0.00	0.00	0.00
End of Build	1700.00	18.000	145.000	1685.27	-114.86	80.42	2.00	-107.99
End of Tangent	3608.12	18.000	145.000	3500.00	-597.86	418.63	0.00	-562.10
End of 3D Arc (J)	3794.94	19.842	155.048	3676.76	-650.27	448.57	2.00	-611.92
End of Tangent (J)	5817.37	19.842	155.048	5579.13	-1272.67	738.16	0.00	-1208.90
End of 3D Arc (DBL)	6310.24	30.000	352.000	6054.00	-1223.41	757.51	10.00	-1158.24
End of 3D Arc (DBL)	6914.60	90.000	1.318	6343.00	-724.56	741.96	10.00	-662.28
End of 3D Arc (J)	12181.09	90.000	359.623	6343.00	4541.56	785.21	0.03	4590.14
End of Tangent (J)	16944.17	90.000	359.623	6343.00	9304.54	753.88	0.00	9335.03

## Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1541.46	0.00	0.00	-79.96	55.99	ANTELOPE FEDERAL T34-20-17XRLNB PWB

## Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NewTrak	BHI NewTrak (Rotating+Axial Corr)		ANTELOPE FEDERAL T34-20-17XRLNB PWB
1550.00	17012.68	BHI AutoTrak Curve	BHI AutoTrak Curve (Axial Corr, Short spacing)		ANTELOPE FEDERAL T34-20-17XRLNB PWB

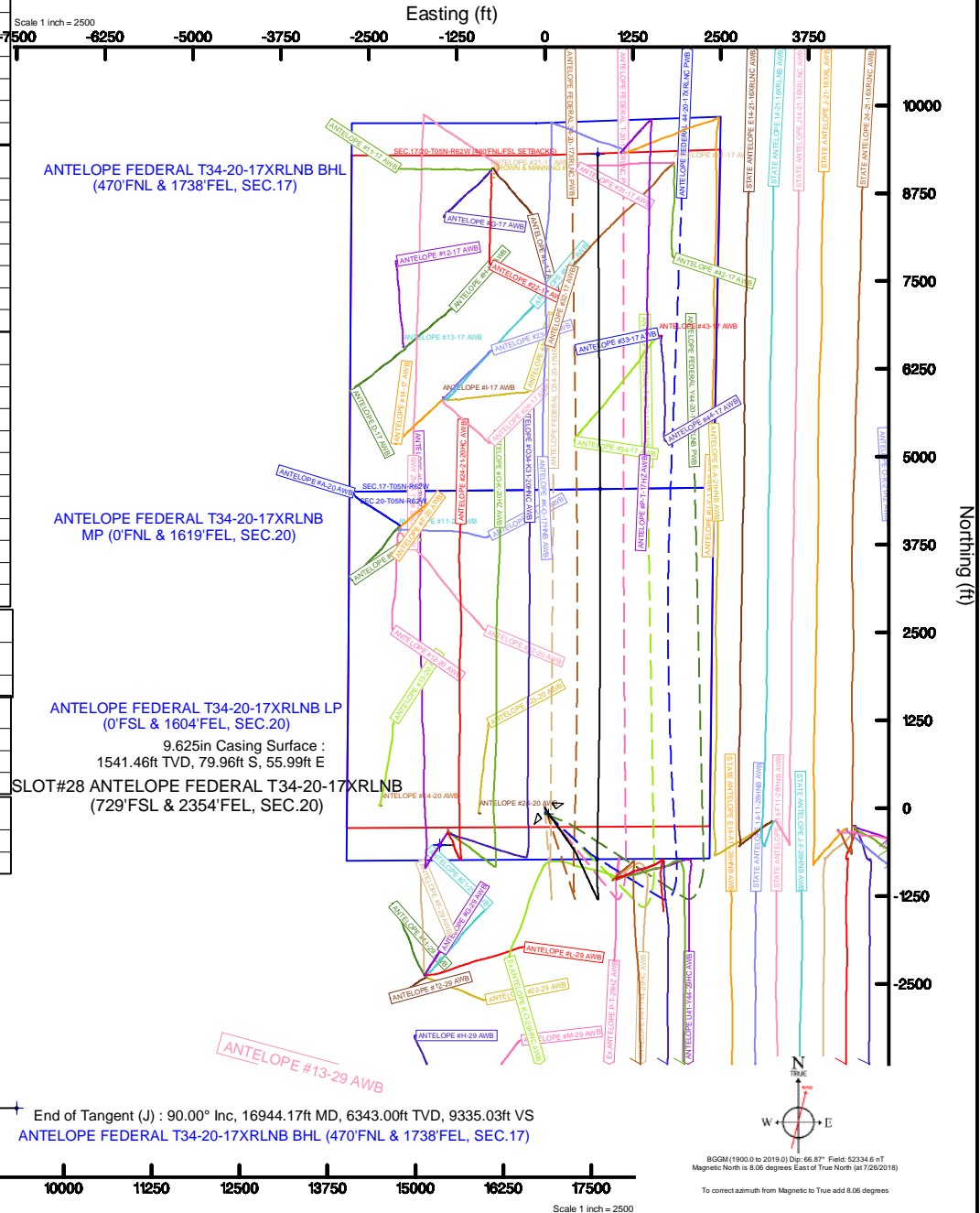
## Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
16944.17	90.000	359.623	6343.00	9304.54	753.88	3321949.61	1392630.68	40°24'19.483"N	104°20'38.058"W

End of Tangent : 18.00° Inc, 3608.12ft MD, 3500.00ft TVD, -562.10ft VS  
2.00°/100ft  
End of 3D Arc (J) : 19.84° Inc, 3794.94ft MD, 3676.76ft TVD, -611.92ft VS  
End of Tangent (J) : 19.84° Inc, 5817.37ft MD, 5579.13ft TVD, -1208.90ft VS  
10.00°/100ft  
End of 3D Arc (DBL) : 30.00° Inc, 6310.24ft MD, 6054.00ft TVD, -1158.24ft VS  
10.00°/100ft  
End of 3D Arc (DBL) : 90.00° Inc, 6914.60ft MD, 6343.00ft TVD, -662.28ft VS  
0.03°/100ft  
End of 3D Arc (J) : 90.00° Inc, 12181.09ft MD, 6343.00ft TVD, 4590.14ft VS

ANTELOPE FEDERAL T34-20-17XRLNB LP (0'FSL & 1604'FEL, SEC.20)

ANTELOPE FEDERAL T34-20-17XRLNB MP (0'FNL & 1619'FEL, SEC.20)





# Planned Wellpath Report

## ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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### REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

### REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Ingmjmr
Scale	0.999959	Report Generated	7/31/2018 at 9:52:22 AM
Convergence at slot	0.75° East	Database/Source file	Denver/ANTELOPE_FEDERAL_T34-20-17XRLNB_PWP__REV-A.0_.xml

### WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-31.97	2334.17	3321316.83	1383317.52	40°22'47.539"N	104°20'47.803"W
Facility Reference Pt			3318982.55	1383319.35	40°22'47.856"N	104°21'17.964"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

### WELLPATH DATUM

Calculation method	Minimum curvature	RIG (17'KB) (RKB) to Facility Vertical Datum	4673.00ft
Horizontal Reference Pt	Slot	RIG (17'KB) (RKB) to Mean Sea Level	4673.00ft
Vertical Reference Pt	RIG (17'KB) (RKB)	RIG (17'KB) (RKB) to Ground Level at Slot (SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20))	4673.00ft
MD Reference Pt	RIG (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	4.63°



# Planned Wellpath Report

## ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (180 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	145.000	0.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
17.00	0.000	145.000	17.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	Tie On
117.00†	0.000	145.000	117.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
217.00†	0.000	145.000	217.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
317.00†	0.000	145.000	317.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
417.00†	0.000	145.000	417.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
517.00†	0.000	145.000	517.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
617.00†	0.000	145.000	617.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
717.00†	0.000	145.000	717.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	
800.00	0.000	145.000	800.00	0.00	0.00	0.00	40°22'47.539"N	104°20'47.803"W	0.00	End of Tangent
817.00†	0.340	145.000	817.00	-0.04	-0.04	0.03	40°22'47.539"N	104°20'47.803"W	2.00	
917.00†	2.340	145.000	916.97	-1.84	-1.96	1.37	40°22'47.520"N	104°20'47.785"W	2.00	
1017.00†	4.340	145.000	1016.79	-6.33	-6.73	4.71	40°22'47.473"N	104°20'47.742"W	2.00	
1117.00†	6.340	145.000	1116.35	-13.49	-14.35	10.05	40°22'47.397"N	104°20'47.673"W	2.00	
1217.00†	8.340	145.000	1215.53	-23.33	-24.82	17.38	40°22'47.294"N	104°20'47.578"W	2.00	
1317.00†	10.340	145.000	1314.20	-35.83	-38.11	26.69	40°22'47.162"N	104°20'47.458"W	2.00	
1417.00†	12.340	145.000	1412.24	-50.97	-54.22	37.96	40°22'47.003"N	104°20'47.312"W	2.00	
1517.00†	14.340	145.000	1509.54	-68.74	-73.12	51.20	40°22'46.816"N	104°20'47.141"W	2.00	
1617.00†	16.340	145.000	1605.97	-89.12	-94.79	66.37	40°22'46.602"N	104°20'46.945"W	2.00	
1700.00	18.000	145.000	1685.27	-107.99	-114.86	80.42	40°22'46.404"N	104°20'46.764"W	2.00	End of Build
1717.00†	18.000	145.000	1701.44	-112.03	-119.16	83.44	40°22'46.362"N	104°20'46.725"W	0.00	
1817.00†	18.000	145.000	1796.54	-135.83	-144.47	101.16	40°22'46.111"N	104°20'46.496"W	0.00	
1917.00†	18.000	145.000	1891.65	-159.63	-169.79	118.88	40°22'45.861"N	104°20'46.267"W	0.00	
2017.00†	18.000	145.000	1986.75	-183.43	-195.10	136.61	40°22'45.611"N	104°20'46.038"W	0.00	
2117.00†	18.000	145.000	2081.86	-207.23	-220.41	154.33	40°22'45.361"N	104°20'45.809"W	0.00	
2217.00†	18.000	145.000	2176.96	-231.03	-245.72	172.06	40°22'45.111"N	104°20'45.580"W	0.00	
2317.00†	18.000	145.000	2272.07	-254.83	-271.04	189.78	40°22'44.861"N	104°20'45.351"W	0.00	
2417.00†	18.000	145.000	2367.18	-278.63	-296.35	207.51	40°22'44.611"N	104°20'45.122"W	0.00	
2517.00†	18.000	145.000	2462.28	-302.42	-321.66	225.23	40°22'44.360"N	104°20'44.893"W	0.00	
2617.00†	18.000	145.000	2557.39	-326.22	-346.98	242.96	40°22'44.110"N	104°20'44.664"W	0.00	



# Planned Wellpath Report

## ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (180 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	18.000	145.000	2652.49	-350.02	-372.29	260.68	40°22'43.860"N	104°20'44.435"W	0.00	
2817.00†	18.000	145.000	2747.60	-373.82	-397.60	278.41	40°22'43.610"N	104°20'44.206"W	0.00	
2917.00†	18.000	145.000	2842.70	-397.62	-422.92	296.13	40°22'43.360"N	104°20'43.977"W	0.00	
3017.00†	18.000	145.000	2937.81	-421.42	-448.23	313.85	40°22'43.110"N	104°20'43.748"W	0.00	
3117.00†	18.000	145.000	3032.92	-445.22	-473.54	331.58	40°22'42.860"N	104°20'43.519"W	0.00	
3217.00†	18.000	145.000	3128.02	-469.02	-498.86	349.30	40°22'42.609"N	104°20'43.290"W	0.00	
3317.00†	18.000	145.000	3223.13	-492.82	-524.17	367.03	40°22'42.359"N	104°20'43.061"W	0.00	
3417.00†	18.000	145.000	3318.23	-516.62	-549.48	384.75	40°22'42.109"N	104°20'42.832"W	0.00	
3517.00†	18.000	145.000	3413.34	-540.42	-574.80	402.48	40°22'41.859"N	104°20'42.603"W	0.00	
3608.12	18.000	145.000	3500.00	-562.10	-597.86	418.63	40°22'41.631"N	104°20'42.394"W	0.00	End of Tangent
3617.00†	18.075	145.520	3508.44	-564.23	-600.12	420.19	40°22'41.609"N	104°20'42.374"W	2.00	
3717.00†	19.008	151.086	3603.26	-589.84	-627.17	436.85	40°22'41.342"N	104°20'42.158"W	2.00	
3794.94	19.842	155.048	3676.76	-611.92	-650.27	448.57	40°22'41.113"N	104°20'42.007"W	2.00	End of 3D Arc (J)
3817.00†	19.842	155.048	3697.51	-618.43	-657.06	451.73	40°22'41.046"N	104°20'41.966"W	0.00	
3917.00†	19.842	155.048	3791.58	-647.95	-687.84	466.05	40°22'40.742"N	104°20'41.781"W	0.00	
4017.00†	19.842	155.048	3885.64	-677.47	-718.61	480.37	40°22'40.438"N	104°20'41.596"W	0.00	
4117.00†	19.842	155.048	3979.70	-706.99	-749.38	494.69	40°22'40.134"N	104°20'41.411"W	0.00	
4217.00†	19.842	155.048	4073.77	-736.50	-780.16	509.00	40°22'39.830"N	104°20'41.226"W	0.00	
4317.00†	19.842	155.048	4167.83	-766.02	-810.93	523.32	40°22'39.526"N	104°20'41.041"W	0.00	
4417.00†	19.842	155.048	4261.89	-795.54	-841.71	537.64	40°22'39.221"N	104°20'40.856"W	0.00	
4517.00†	19.842	155.048	4355.96	-825.06	-872.48	551.96	40°22'38.917"N	104°20'40.671"W	0.00	
4617.00†	19.842	155.048	4450.02	-854.57	-903.26	566.28	40°22'38.613"N	104°20'40.486"W	0.00	
4717.00†	19.842	155.048	4544.08	-884.09	-934.03	580.60	40°22'38.309"N	104°20'40.301"W	0.00	
4817.00†	19.842	155.048	4638.15	-913.61	-964.81	594.92	40°22'38.005"N	104°20'40.116"W	0.00	
4917.00†	19.842	155.048	4732.21	-943.13	-995.58	609.24	40°22'37.701"N	104°20'39.931"W	0.00	
5017.00†	19.842	155.048	4826.27	-972.65	-1026.36	623.56	40°22'37.397"N	104°20'39.746"W	0.00	
5117.00†	19.842	155.048	4920.34	-1002.16	-1057.13	637.88	40°22'37.093"N	104°20'39.561"W	0.00	
5217.00†	19.842	155.048	5014.40	-1031.68	-1087.90	652.19	40°22'36.789"N	104°20'39.376"W	0.00	
5317.00†	19.842	155.048	5108.46	-1061.20	-1118.68	666.51	40°22'36.484"N	104°20'39.191"W	0.00	
5417.00†	19.842	155.048	5202.53	-1090.72	-1149.45	680.83	40°22'36.180"N	104°20'39.006"W	0.00	



# Planned Wellpath Report

## ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (180 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5517.00†	19.842	155.048	5296.59	-1120.23	-1180.23	695.15	40°22'35.876"N	104°20'38.821"W	0.00	
5617.00†	19.842	155.048	5390.65	-1149.75	-1211.00	709.47	40°22'35.572"N	104°20'38.636"W	0.00	
5717.00†	19.842	155.048	5484.72	-1179.27	-1241.78	723.79	40°22'35.268"N	104°20'38.451"W	0.00	
5817.00†	19.842	155.048	5578.78	-1208.79	-1272.55	738.11	40°22'34.964"N	104°20'38.266"W	0.00	
5817.37	19.842	155.048	5579.13	-1208.90	-1272.67	738.16	40°22'34.963"N	104°20'38.265"W	0.00	End of Tangent (J)
5917.00†	10.239	144.258	5675.25	-1230.40	-1295.24	750.50	40°22'34.740"N	104°20'38.106"W	10.00	
6017.00†	3.772	68.434	5774.60	-1235.73	-1301.26	758.77	40°22'34.680"N	104°20'37.999"W	10.00	
6117.00†	11.106	4.962	5873.80	-1224.62	-1290.43	762.67	40°22'34.787"N	104°20'37.949"W	10.00	
6217.00†	20.788	355.417	5969.86	-1197.40	-1263.08	762.08	40°22'35.058"N	104°20'37.956"W	10.00	
6310.24	30.000	352.000	6054.00	-1158.24	-1223.41	757.51	40°22'35.450"N	104°20'38.015"W	10.00	End of 3D Arc (DBL)
6317.00†	30.664	352.247	6059.84	-1154.91	-1220.03	757.04	40°22'35.483"N	104°20'38.021"W	10.00	
6417.00†	40.533	355.042	6141.05	-1097.81	-1162.24	750.78	40°22'36.054"N	104°20'38.102"W	10.00	
6517.00†	50.447	356.890	6211.07	-1027.39	-1091.19	745.86	40°22'36.756"N	104°20'38.166"W	10.00	
6617.00†	60.383	358.272	6267.76	-945.79	-1009.04	742.45	40°22'37.568"N	104°20'38.210"W	10.00	
6717.00†	70.330	359.403	6309.41	-855.47	-918.28	740.65	40°22'38.465"N	104°20'38.233"W	10.00	
6817.00†	80.283	0.401	6334.74	-759.19	-821.68	740.50	40°22'39.419"N	104°20'38.235"W	10.00	
6914.60	90.000	1.318	6343.00†	-662.28	-724.56	741.96	40°22'40.379"N	104°20'38.216"W	10.00	End of 3D Arc (DBL)
6917.00†	90.000	1.317	6343.00	-659.88	-722.16	742.02	40°22'40.403"N	104°20'38.215"W	0.03	
7017.00†	90.000	1.285	6343.00	-560.04	-622.18	744.29	40°22'41.391"N	104°20'38.186"W	0.03	
7117.00†	90.000	1.253	6343.00	-460.22	-522.21	746.50	40°22'42.379"N	104°20'38.157"W	0.03	
7217.00†	90.000	1.221	6343.00	-360.39	-422.23	748.66	40°22'43.367"N	104°20'38.129"W	0.03	
7317.00†	90.000	1.188	6343.00	-260.57	-322.25	750.76	40°22'44.354"N	104°20'38.102"W	0.03	
7417.00†	90.000	1.156	6343.00	-160.75	-222.27	752.81	40°22'45.342"N	104°20'38.076"W	0.03	
7517.00†	90.000	1.124	6343.00	-60.94	-122.29	754.80	40°22'46.330"N	104°20'38.050"W	0.03	
7617.00†	90.000	1.092	6343.00	38.87	-22.31	756.73	40°22'47.318"N	104°20'38.025"W	0.03	
7717.00†	90.000	1.060	6343.00	138.68	77.67	758.61	40°22'48.306"N	104°20'38.001"W	0.03	
7817.00†	90.000	1.028	6343.00	238.48	177.65	760.43	40°22'49.294"N	104°20'37.977"W	0.03	
7917.00†	90.000	0.995	6343.00	338.28	277.64	762.20	40°22'50.282"N	104°20'37.954"W	0.03	
8017.00†	90.000	0.963	6343.00	438.08	377.62	763.91	40°22'51.270"N	104°20'37.932"W	0.03	
8117.00†	90.000	0.931	6343.00	537.87	477.61	765.56	40°22'52.258"N	104°20'37.911"W	0.03	





# Planned Wellpath Report

ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (180 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8217.00†	90.000	0.899	6343.00	637.66	577.60	767.16	40°22'53.246"N	104°20'37.890"W	0.03	
8317.00†	90.000	0.867	6343.00	737.45	677.58	768.70	40°22'54.235"N	104°20'37.870"W	0.03	
8417.00†	90.000	0.834	6343.00	837.23	777.57	770.18	40°22'55.223"N	104°20'37.851"W	0.03	
8517.00†	90.000	0.802	6343.00	937.01	877.56	771.61	40°22'56.211"N	104°20'37.832"W	0.03	
8617.00†	90.000	0.770	6343.00	1036.79	977.55	772.98	40°22'57.199"N	104°20'37.815"W	0.03	
8717.00†	90.000	0.738	6343.00	1136.56	1077.54	774.30	40°22'58.187"N	104°20'37.797"W	0.03	
8817.00†	90.000	0.706	6343.00	1236.32	1177.54	775.56	40°22'59.175"N	104°20'37.781"W	0.03	
8917.00†	90.000	0.674	6343.00	1336.09	1277.53	776.76	40°23'00.163"N	104°20'37.766"W	0.03	
9017.00†	90.000	0.641	6343.00	1435.85	1377.52	777.91	40°23'01.151"N	104°20'37.751"W	0.03	
9117.00†	90.000	0.609	6343.00	1535.60	1477.52	779.00	40°23'02.139"N	104°20'37.737"W	0.03	
9217.00†	90.000	0.577	6343.00	1635.35	1577.51	780.03	40°23'03.127"N	104°20'37.723"W	0.03	
9317.00†	90.000	0.545	6343.00	1735.10	1677.51	781.01	40°23'04.115"N	104°20'37.710"W	0.03	
9417.00†	90.000	0.513	6343.00	1834.84	1777.50	781.94	40°23'05.104"N	104°20'37.698"W	0.03	
9517.00†	90.000	0.480	6343.00	1934.58	1877.50	782.80	40°23'06.092"N	104°20'37.687"W	0.03	
9617.00†	90.000	0.448	6343.00	2034.32	1977.50	783.61	40°23'07.080"N	104°20'37.677"W	0.03	
9717.00†	90.000	0.416	6343.00	2134.05	2077.49	784.37	40°23'08.068"N	104°20'37.667"W	0.03	
9817.00†	90.000	0.384	6343.00	2233.78	2177.49	785.07	40°23'09.056"N	104°20'37.658"W	0.03	
9917.00†	90.000	0.352	6343.00	2333.50	2277.49	785.71	40°23'10.044"N	104°20'37.650"W	0.03	
10017.00†	90.000	0.320	6343.00	2433.22	2377.49	786.29	40°23'11.032"N	104°20'37.642"W	0.03	
10117.00†	90.000	0.287	6343.00	2532.94	2477.48	786.82	40°23'12.021"N	104°20'37.635"W	0.03	
10217.00†	90.000	0.255	6343.00	2632.65	2577.48	787.30	40°23'13.009"N	104°20'37.629"W	0.03	
10317.00†	90.000	0.223	6343.00	2732.35	2677.48	787.71	40°23'13.997"N	104°20'37.623"W	0.03	
10417.00†	90.000	0.191	6343.00	2832.05	2777.48	788.08	40°23'14.985"N	104°20'37.619"W	0.03	
10517.00†	90.000	0.159	6343.00	2931.75	2877.48	788.38	40°23'15.973"N	104°20'37.615"W	0.03	
10617.00†	90.000	0.126	6343.00	3031.44	2977.48	788.63	40°23'16.961"N	104°20'37.611"W	0.03	
10717.00†	90.000	0.094	6343.00	3131.13	3077.48	788.82	40°23'17.950"N	104°20'37.609"W	0.03	
10817.00†	90.000	0.062	6343.00	3230.82	3177.48	788.96	40°23'18.938"N	104°20'37.607"W	0.03	
10917.00†	90.000	0.030	6343.00	3330.50	3277.48	789.04	40°23'19.926"N	104°20'37.606"W	0.03	
11017.00†	90.000	359.998	6343.00	3430.17	3377.48	789.06	40°23'20.914"N	104°20'37.606"W	0.03	
11117.00†	90.000	359.966	6343.00	3529.84	3477.48	789.03	40°23'21.902"N	104°20'37.606"W	0.03	



# Planned Wellpath Report

## ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (180 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11217.00†	90.000	359.933	6343.00	3629.51	3577.48	788.94	40°23'22.890"N	104°20'37.607"W	0.03	
11317.00†	90.000	359.901	6343.00	3729.17	3677.48	788.80	40°23'23.878"N	104°20'37.609"W	0.03	
11417.00†	90.000	359.869	6343.00	3828.83	3777.48	788.60	40°23'24.867"N	104°20'37.612"W	0.03	
11517.00†	90.000	359.837	6343.00	3928.48	3877.48	788.34	40°23'25.855"N	104°20'37.615"W	0.03	
11617.00†	90.000	359.805	6343.00	4028.13	3977.48	788.03	40°23'26.843"N	104°20'37.619"W	0.03	
11717.00†	90.000	359.772	6343.00	4127.77	4077.48	787.66	40°23'27.831"N	104°20'37.624"W	0.03	
11817.00†	90.000	359.740	6343.00	4227.41	4177.48	787.23	40°23'28.819"N	104°20'37.629"W	0.03	
11917.00†	90.000	359.708	6343.00	4327.04	4277.48	786.75	40°23'29.807"N	104°20'37.635"W	0.03	
12017.00†	90.000	359.676	6343.00	4426.67	4377.48	786.22	40°23'30.796"N	104°20'37.642"W	0.03	
12117.00†	90.000	359.644	6343.00	4526.30	4477.47	785.62	40°23'31.784"N	104°20'37.650"W	0.03	
12181.09	90.000	359.623	6343.00 <sup>2</sup>	4590.14	4541.56	785.21	40°23'32.417"N	104°20'37.655"W	0.03	End of 3D Arc (J)
12217.00†	90.000	359.623	6343.00	4625.91	4577.47	784.98	40°23'32.772"N	104°20'37.658"W	0.00	
12317.00†	90.000	359.623	6343.00	4725.53	4677.47	784.32	40°23'33.760"N	104°20'37.666"W	0.00	
12417.00†	90.000	359.623	6343.00	4825.15	4777.47	783.66	40°23'34.748"N	104°20'37.675"W	0.00	
12517.00†	90.000	359.623	6343.00	4924.77	4877.47	783.00	40°23'35.736"N	104°20'37.683"W	0.00	
12617.00†	90.000	359.623	6343.00	5024.39	4977.46	782.34	40°23'36.724"N	104°20'37.692"W	0.00	
12717.00†	90.000	359.623	6343.00	5124.00	5077.46	781.69	40°23'37.713"N	104°20'37.700"W	0.00	
12817.00†	90.000	359.623	6343.00	5223.62	5177.46	781.03	40°23'38.701"N	104°20'37.709"W	0.00	
12917.00†	90.000	359.623	6343.00	5323.24	5277.46	780.37	40°23'39.689"N	104°20'37.717"W	0.00	
13017.00†	90.000	359.623	6343.00	5422.86	5377.45	779.71	40°23'40.677"N	104°20'37.726"W	0.00	
13117.00†	90.000	359.623	6343.00	5522.48	5477.45	779.06	40°23'41.665"N	104°20'37.734"W	0.00	
13217.00†	90.000	359.623	6343.00	5622.10	5577.45	778.40	40°23'42.653"N	104°20'37.743"W	0.00	
13317.00†	90.000	359.623	6343.00	5721.71	5677.45	777.74	40°23'43.641"N	104°20'37.751"W	0.00	
13417.00†	90.000	359.623	6343.00	5821.33	5777.45	777.08	40°23'44.630"N	104°20'37.760"W	0.00	
13517.00†	90.000	359.623	6343.00	5920.95	5877.44	776.43	40°23'45.618"N	104°20'37.768"W	0.00	
13617.00†	90.000	359.623	6343.00	6020.57	5977.44	775.77	40°23'46.606"N	104°20'37.776"W	0.00	
13717.00†	90.000	359.623	6343.00	6120.19	6077.44	775.11	40°23'47.594"N	104°20'37.785"W	0.00	
13817.00†	90.000	359.623	6343.00	6219.80	6177.44	774.45	40°23'48.582"N	104°20'37.793"W	0.00	
13917.00†	90.000	359.623	6343.00	6319.42	6277.44	773.79	40°23'49.570"N	104°20'37.802"W	0.00	
14017.00†	90.000	359.623	6343.00	6419.04	6377.43	773.14	40°23'50.558"N	104°20'37.810"W	0.00	



# Planned Wellpath Report

ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (180 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14117.00†	90.000	359.623	6343.00	6518.66	6477.43	772.48	40°23'51.547"N	104°20'37.819"W	0.00	
14217.00†	90.000	359.623	6343.00	6618.28	6577.43	771.82	40°23'52.535"N	104°20'37.827"W	0.00	
14317.00†	90.000	359.623	6343.00	6717.89	6677.43	771.16	40°23'53.523"N	104°20'37.836"W	0.00	
14417.00†	90.000	359.623	6343.00	6817.51	6777.42	770.51	40°23'54.511"N	104°20'37.844"W	0.00	
14517.00†	90.000	359.623	6343.00	6917.13	6877.42	769.85	40°23'55.499"N	104°20'37.853"W	0.00	
14617.00†	90.000	359.623	6343.00	7016.75	6977.42	769.19	40°23'56.487"N	104°20'37.861"W	0.00	
14717.00†	90.000	359.623	6343.00	7116.37	7077.42	768.53	40°23'57.475"N	104°20'37.870"W	0.00	
14817.00†	90.000	359.623	6343.00	7215.98	7177.42	767.87	40°23'58.464"N	104°20'37.878"W	0.00	
14917.00†	90.000	359.623	6343.00	7315.60	7277.41	767.22	40°23'59.452"N	104°20'37.886"W	0.00	
15017.00†	90.000	359.623	6343.00	7415.22	7377.41	766.56	40°24'00.440"N	104°20'37.895"W	0.00	
15117.00†	90.000	359.623	6343.00	7514.84	7477.41	765.90	40°24'01.428"N	104°20'37.903"W	0.00	
15217.00†	90.000	359.623	6343.00	7614.46	7577.41	765.24	40°24'02.416"N	104°20'37.912"W	0.00	
15317.00†	90.000	359.623	6343.00	7714.08	7677.40	764.59	40°24'03.404"N	104°20'37.920"W	0.00	
15417.00†	90.000	359.623	6343.00	7813.69	7777.40	763.93	40°24'04.392"N	104°20'37.929"W	0.00	
15517.00†	90.000	359.623	6343.00	7913.31	7877.40	763.27	40°24'05.381"N	104°20'37.937"W	0.00	
15617.00†	90.000	359.623	6343.00	8012.93	7977.40	762.61	40°24'06.369"N	104°20'37.946"W	0.00	
15717.00†	90.000	359.623	6343.00	8112.55	8077.40	761.96	40°24'07.357"N	104°20'37.954"W	0.00	
15817.00†	90.000	359.623	6343.00	8212.17	8177.39	761.30	40°24'08.345"N	104°20'37.963"W	0.00	
15917.00†	90.000	359.623	6343.00	8311.78	8277.39	760.64	40°24'09.333"N	104°20'37.971"W	0.00	
16017.00†	90.000	359.623	6343.00	8411.40	8377.39	759.98	40°24'10.321"N	104°20'37.980"W	0.00	
16117.00†	90.000	359.623	6343.00	8511.02	8477.39	759.32	40°24'11.309"N	104°20'37.988"W	0.00	
16217.00†	90.000	359.623	6343.00	8610.64	8577.39	758.67	40°24'12.298"N	104°20'37.996"W	0.00	
16317.00†	90.000	359.623	6343.00	8710.26	8677.38	758.01	40°24'13.286"N	104°20'38.005"W	0.00	
16417.00†	90.000	359.623	6343.00	8809.87	8777.38	757.35	40°24'14.274"N	104°20'38.013"W	0.00	
16517.00†	90.000	359.623	6343.00	8909.49	8877.38	756.69	40°24'15.262"N	104°20'38.022"W	0.00	
16617.00†	90.000	359.623	6343.00	9009.11	8977.38	756.04	40°24'16.250"N	104°20'38.030"W	0.00	
16717.00†	90.000	359.623	6343.00	9108.73	9077.37	755.38	40°24'17.238"N	104°20'38.039"W	0.00	
16817.00†	90.000	359.623	6343.00	9208.35	9177.37	754.72	40°24'18.226"N	104°20'38.047"W	0.00	
16917.00†	90.000	359.623	6343.00	9307.96	9277.37	754.06	40°24'19.215"N	104°20'38.056"W	0.00	
16944.17	90.000	359.623	6343.00 <sup>3</sup>	9335.03	9304.54	753.88	40°24'19.483"N	104°20'38.058"W	0.00	End of Tangent (J)



HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL T34-20-17XRLNB PWB      Ref Wellpath: ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1541.46	0.00	0.00	-79.96	55.99

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.17-T05N-R62W		-8.00	-528.21	-1495.06	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
SEC.20-T05N-R62W		-8.00	-528.21	-1495.06	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
3) ANTELOPE FEDERAL T34-20-17XRLNB BHL (470'FNL & 1738'FEL, SEC.17)	16944.17	6343.00	9304.54	753.88	3321949.61	1392630.68	40°24'19.483"N	104°20'38.058"W	point
1) ANTELOPE FEDERAL T34-20-17XRLNB LP (0'FSL & 1604'FEL, SEC.20)	6914.60	6343.00	-724.56	741.96	3322068.12	1382602.70	40°22'40.379"N	104°20'38.216"W	point
2) ANTELOPE FEDERAL T34-20-17XRLNB MP (0'FNL & 1619'FEL, SEC.20)	12181.09	6343.00	4541.56	785.21	3322042.88	1387868.71	40°23'32.417"N	104°20'37.655"W	point
SEC.17/20-T05N-R62W (460'FNL/FSL SETBACKS)		6373.00	-528.21	-1495.06	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: ANTELOPE FEDERAL T34-20-17XRLNB PWB      Ref Wellpath: ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NaviTrak (Rotating+Axial Corr)		ANTELOPE FEDERAL T34-20-17XRLNB PWB
1550.00	17012.68	BHI AutoTrak Curve (Axial Corr, Short spacing)		ANTELOPE FEDERAL T34-20-17XRLNB PWB



# Planned Wellpath Report

ANTELOPE FEDERAL T34-20-17XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#28 ANTELOPE FEDERAL T34-20-17XRLNB (729'FSL & 2354'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T34-20-17XRLNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T34-20-17XRLNB PWB
Facility	SEC.20-T05N-R62W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	145.000	17.00	Tie On
800.00	0.000	145.000	800.00	End of Tangent
1700.00	18.000	145.000	1685.27	End of Build
3608.12	18.000	145.000	3500.00	End of Tangent
3794.94	19.842	155.048	3676.76	End of 3D Arc (J)
5817.37	19.842	155.048	5579.13	End of Tangent (J)
6310.24	30.000	352.000	6054.00	End of 3D Arc (DBL)
6914.60	90.000	1.318	6343.00	End of 3D Arc (DBL)
12181.09	90.000	359.623	6343.00	End of 3D Arc (J)
16944.17	90.000	359.623	6343.00	End of Tangent (J)